

REMARKS

Claims 1-7 remain active in the application. Claims 1, 4, 5 and 7 have been amended.

Claims 8-15 were previously withdrawn from consideration.

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Applicants' Admitted Prior Art [AAPA] Figure 1 in combination with Chang et al. (U.S.P. 6,696,717) [Chang].

Applicants wish to express to the Examiner their appreciation for the time spent in his Telephone Interview conducted on June 28, 2007.

Applicants summarize the issues discussed in the course of the Telephone Interview:

The Examiner pointed out the recitation of Chang on col. 3, lines 48-50, in which Chang states that "the first and second conductive layers 116, 124 are used as a control gate of the memory cell". By doing so, the Examiner states that Chang has two layers controlling the channel, and not one as argued by the Applicants.

The Applicants stated that they felt it would be unlikely for Chang's conductive layer 124 to control the channel since layer 124 is totally insulated from the channel by insulating spacers 122. By doing so, and notwithstanding the above cited recitation by Chang (lines 48-50), Applicants believe that Chang is left with only a single conductive layer 116 to control the channel. In response, the Examiner stated that he was relying on Chang, and let the rejection of claim 1-7 stand.

In view of the foregoing, and in order to advance the prosecution of the present invention, Applicants have now amended independent claims 1 and 7 to recite that within the deep trench, there are three conductive layers superimposed to one another forming a gate controlling the channel. Of these, the bottom two are made of two different materials.

Applicants contend that the presence of three conductive layers within the deep trench, all of which contributing in some manner to control the channel sufficiently differentiates Applicants' invention from the combination of Admitted Prior Art Figure 1 in combination with Chang.

Applicants submit further that the gate 127 shown by Chang is not formed within the deep trench by outside, and as such is not included in the conductive layers listed by Chang.

Furthermore, in order to further clarify the three conductive layers recited in the now amended claims 1 and 7, Applicants have introduced a further limitation that the topmost conductive layer within the deep trench is insulated by spacers. Applicants believe that such a recitation allows to clearly correlate and point out the differences between Applicants' teaching against the combination of AAPA Figure 1 and Chang.

Thus, Applicants believe that they have overcome the rejection of claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over Applicants' prior art Figure 1 [AAPA] in view of Chang, and respectfully request that the Examiner reconsider and withdraw the rejection of the stated claims based thereon.

In view of the foregoing, it is respectfully requested that all the outstanding objections and rejections to this application be reconsidered and withdrawn and that the Examiner pass all the pending claims to issue.

Should the Examiner have any suggestions pertinent to the allowance of this application, the Examiner is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,
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